but the insured, for we are dealing with nurses who are in the large majority women, who are seriously working for a profession which they love and wherein the rewards of their ability and efforts are meagre, and where, in their endeavor, by insurance, to save something from their earnings, they must pay at least 20 to 30 per cent. more than would be the case if they had an insurance company owned and operated by nurses with moderately paid officers, unpretentious offices, and no agents.

In studying the different kinds of insurance for nurses, I believe we have only two kinds to consider, that of the annuity policy, and the simple life policy. Personally, I believe the annuity policy satisfies all the contingencies of the self-supporting nurse. This policy is one by which the annuitant pays to the company quarterly, or semi-annually, a certain sum of money, for a given period of time, after which time the company pays to the annuitant, either quarterly or semi-annually, an annuity for life; another arrangement, which is practical in the suggestions, is to allow the annuitant to receive, instead of the annuity for life, the aggregate amount of her savings in one payment, thus enabling her to engage in business or prepare herself for some of the specialties which are now presented in the nursing profession, and to which middle age is not a hindrance.

For the nurse who is not only self-supporting but a bread winner for others as well, I believe the simple life policy as well as the annuity policy is advisable. This policy requires a small sum to be paid annually and at death a stipulated sum is paid to the heirs of the policy holder. This simple life policy may also represent at all times an asset upon which the nurse or policy holder may obtain loans, which is often a necessity in illness or forced idleness. In the formation of an insurance company for nurses, every provision should be made for saving and for protection during the period of saving, but the policies should be clear, honest, and straightforward, so that the nurse may make no mistake in choosing the policy which is best for her, as an individual.

## HOUSEHOLD HYGIENE

BY ISABEL McISAAC (Continued from Vol. IX, No. 11, page 834)

## VI

## SEWAGE AND GARBAGE

THE disposal of sewage and garbage presents few difficulties to the dwellers in the larger and older cities, who live in apartments or wellbuilt houses; but from casual observation in small towns and the country

one might suppose that the problem was as insurmountable as finding the North Pole or electing a Democratic president.

The general lack of intelligence upon the subject was never more tragically exemplified than in the awful prevalence of typhoid fever and dysentery during the Spanish-American War—a scourge which owed its origin to the ignorance which defiled its own water supply. We have learned much in the decade which has followed, but not until every public school child is taught the dangers from ill-disposed sewage and garbage will an army of volunteer soldiers know how to protect itself.

The final disposal of sewage in the country is a much more difficult problem than getting rid of the garbage. Without house drains the waste water from baths, dishwashing, scrubbing and laundry must be carried a safe distance from the well and the house to be emptied, a proceeding so inconvenient and difficult that it is small wonder so many housewives stand in the kitchen doorway and throw the water as far as their strength permits, regardless of the well or the looks of the back yard.

It is inexcusable for the smallest rural cottage to lack a drain for carrying off waste water, for if the drain is long enough it may be discharged into a hogshead without a bottom which is sunken into the ground and then well covered. In fact with a porous soil if the drain be carried seventy or eighty yards from the well, all sewage—water-closets included—may be discharged in this way with no bad results. The soil and certain soil bacteria together will purify enormous quantities of sewage in such a cesspool. If the drain carries nothing worse than waste water it may be discharged upon the surface where the sun and wind soon purify it.

In country places an open cesspool filled with stones is often used for emptying slops of all kinds, but such an arrangement is usually near the house, is a source of foul odors and a breeding place for flies, and it would be much more sanitary to empty the waste upon the surface, where it dries quickly and is purified by the action of the sun. In many cities the garbage is collected irregularly, causing disgusting accumulations offensive both to sight and smell. Under these circumstances every housekeeper might appreciably lessen the nuisance by burning everything possible in the range or furnace. Large cans or covered boxes may be used for the accumulation of paper, pasteboard, east-off shoes, etc., the collection being saved for burning on cool days. The enlarged section in the pipe of the range containing a wire basket for drying kitchen refuse is a simple and satisfactory way of disposing of the most troublesome of household garbage, a few hours being sufficient to dry out the matter enough to burn it readily.

In small towns and the country the kitchen refuse is easily disposed of by domestic animals, but a common sight which is alike offensive and dangerous is the open can or pail for garbage, which stands under the kitchen table or at the kitchen door to attract flies. These receptacles are often unwashed after emptying, and afford a culture media for bacteria as well as a breeding place for flies. Such receptacles should always be kept closely covered and, if no fluids are put into them, they may be lined with old newspapers, the whole being emptied together, which leaves the sides and bottom usually entirely free from grease and the can may be rinsed with cold water.

For a small family an earthen bowl with a plate for a cover is a satisfactory receptacle for kitchen refuse; it does not rust, has no crevices, and is easily washed and kept free from odors.

In the country a weekly bonfire is all that is necessary for the disposal of paper, etc.

The old-fashioned privy vault is still painfully common in small towns and villages, as well as upon the farm, affording a never-ending source of danger to the water supply and a breeding place for flies. It seems almost incredible that such arrangements are still in existence when it is so easy and simple a matter to better them. A large galvanized pail, a tightly covered seat and a box of lime or land plaster or clean sand to cover the contents after each use, will control all bad odors, prevent the breeding of flies and the pollution of the well. The pail should be emptied frequently upon the surface of the ground at a safe distance from the house and well and be covered with a layer of earth, care being taken to avoid using the same spot twice in succession, and the sun, wind, and soil bacteria will finish the work of disposal. The pail used in such an earth closet should be thoroughly washed and the sides and bottom dusted with lime or sand before it is returned to the closet.

When one considers the danger of infections carried by house flies which are now frequently called typhoid flies, one wonders why the population of many small towns does not annually succumb to typhoid fever, tuberculosis, diphtheria, and other dirt diseases. The control of infectious diseases which are carried by house flies lies very largely in the hands of housekeepers. Unclean water-closets, privies, garbage cans, slop hoppers, basements, back yards, and alleys all attract flies and afford breeding places for them, and ultimately they find their way into food and upon dishes, napkins, towels, and other articles which come into contact with food. Thus the whole matter may be solved by the practice of cleanliness.

(To be continued.)